

**TRANSMITTAL LETTER TO THE UNITED STATES  
DESIGNATED/ELECTED OFFICE (DO/EO/US)  
CONCERNING A FILING UNDER 35 U.S.C. 371**

55178-015

U.S. APPLIC. NO. (if known, see 37 CFR 1.5)

**10/031375**

INTERNATIONAL APPLICATION NO.

INTERNATIONAL FILING DATE

PRIORITY DATE CLAIMED

PCT/US00/19728

July 20, 2000

July 20, 1999

TITLE OF INVENTION

A WATCH WITH ROTATING CONICAL BANDS AND WITH REMOVABLE OBJECTS

APPLICANTS FOR DO/EO/US

William H. HOHENSTEIN, Andrew VON ZODORA-GERLOF and Ron DE CORTE

Applicant herewith submits to the United States Designated/Elected Office (DO/EO/US) the following items and other information:

1. ☒ This is a **FIRST** submission of items concerning a filing under 35 U.S.C. 371.
2. ☐ This is a **SECOND** or **SUBSEQUENT** submission of items concerning a filing under 35 U.S.C. 371.
3. ☒ This express request to begin national examination procedures (35 U.S.C. 371(f)) at any time rather than delay examination until the expiration of the applicable time limit set in 35 U.S.C. 371(b) and PCT Articles 22 and 39(1).
4. ☒ A proper Demand for International Preliminary Examination was made by the 19th month from the earliest claimed priority date
5. ☒ A copy of the International Application as filed (35 U.S.C. 371(c)(2))
6. ☒ is transmitted herewith (required only if not transmitted by the International Bureau).
7. ☒ has been transmitted by the International Bureau.
8. ☐ is not required, as the application was filed in the United States Receiving Office (RO/US)
9. ☐ A translation of the International Application into English (35 U.S.C. 371(c)(2)).
10. ☐ Amendments to the claims of the International Application under PCT Article 19 (35 U.S.C. 371(c)(3))
11. ☐ are transmitted herewith (required only if not transmitted by the International Bureau).
12. ☐ have been transmitted by the International Bureau.
13. ☐ have not been made; however, the time limit for making such amendment has NOT expired.
14. ☐ have not been made and will not be made.
15. ☐ A translation of the amendments to the claims under PCT Article 19 (35 U.S.C. 371(c)(3)).
16. ☐ An oath or declaration of the inventor(s) (35 U.S.C. 371(c)(4)).
17. ☐ A translation of the annexes to the International Preliminary Examination Report under PCT Article 36 (35 U.S.C. 371(c)(5))

Items 11. to 16. below concern other document(s) or information included:

11. ☒ An Information Disclosure Statement under 37 CFR 1.97 and 1.98.
12. ☐ An assignment document for recording. A separate cover sheet in compliance with 37 CFR 3.28 and 3.31 is included.
13. ☒ A FIRST preliminary amendment.
14. ☐ A SECOND or SUBSEQUENT preliminary amendment
15. ☐ A substitute specification.
16. ☐ A change of power of attorney and/or address letter.
17. ☒ Other items or information
1. International Search Report Prepared by EPO
2. Front Page of Publish International Application
3. International Preliminary Examination Report
4. Applicant Is Entitled To Claim Small Entity Status



20277

PATENT TRADEMARK OFFICE

U.S. APPLIC. NO. (if known, see 37 CFR 1.50) <b>10/031375</b>		INTERNATIONAL APPLICATION NO. PCT/US00/19728		ATTORNEY'S DOCKET NUMBER 55178-015															
				CALCULATIONS	PTO USE ONLY														
17- <input checked="" type="checkbox"/> The following fees are submitted:  <b>Basic National Fee (37 CFR 1.492(a)(1)-(5)):</b> Search Report has been prepared by the EPO or JPO <span style="float: right;">\$890.00</span>  International preliminary examination fee paid to USPTO (37 CFR 1.482) <span style="float: right;">\$710.00</span> No international preliminary examination fee paid to USPTO (37 CFR 1.482) but international search fee paid to USPTO (37 CFR 1.445(a)(2)) <span style="float: right;">\$740.00</span>  Neither international preliminary examination fee (37 CFR 1.482) nor international search fee (37 CFR 1.445(a)(2)) paid to USPTO <span style="float: right;">\$1,040.00</span>  International preliminary examination fee paid to USPTO (37 CFR 1.482) and all claims satisfied provisions of PCT Article 33(2)-(4) <span style="float: right;">\$100.00</span>																			
ENTER APPROPRIATE BASIC FEE AMOUNT =				\$ 890.00															
Surcharge of \$130.00 for furnishing the oath or declaration later than <input type="checkbox"/> 20 <input checked="" type="checkbox"/> 30 months from the earliest claimed priority date (37 CFR 1.492(e)).				\$ 130.00															
Claims	Number Filed	Number Extra	Rate																
Total Claims	19 -20 =	0	x \$18.00	\$0.00															
Independent Claims	6 -3 =	3	x \$84.00	\$ 252.00															
Multiple dependent claim(s) (if applicable)			+ \$280.00	\$ 0.00															
TOTAL OF ABOVE CALCULATIONS =				\$1,272.00															
Reduction by 1/2 for filing by small entity, if applicable. Verified Small Entity Statement must also be filed. (Note 37 CFR 1.9, 1.27, 1.28).				\$ 636.00															
SUBTOTAL =				\$636.00															
Processing fee of \$130.00 for furnishing the English translation later than the <input type="checkbox"/> 20 <input type="checkbox"/> 30 months from the earliest claimed priority date (37 CFR 1.492(f)).				+ \$ 0.00															
TOTAL NATIONAL FEE =				\$ 636.00															
Fee for recording the enclosed assignment (37 CFR 1.21(h)). The assignment must be accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31). \$40.00 per property				+ \$ 40.00															
TOTAL FEES ENCLOSED =				\$40.00															
				Amount to be: refunded	\$														
				charged	\$ 636.00														
a. <input type="checkbox"/> A check in the amount of \$ _____ to cover the above fees is enclosed. b. <input checked="" type="checkbox"/> Please charge my Deposit Account No. <u>500417</u> in the amount of \$ <u>636.00</u> , to cover the above fees. A duplicate copy of this sheet is enclosed. c. <input checked="" type="checkbox"/> The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account No. <u>500417</u> . A duplicate copy of this sheet is enclosed.																			
<b>NOTE:</b> Where an appropriate time limit under 37 CFR 1.494 or 1.495 has not been met, a petition to revive (37 CFR 1.137(a) or (b)) must be filed and granted to restore the application to pending status.																			
SEND ALL CORRESPONDENCE TO:																			
Robert L. Price McDERMOTT, WILL & EMERY 600 13 <sup>th</sup> Street, N.W. Washington, DC 20005-3096 (202) 756-8000 Facsimile (202) 756-8087			<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 30%;">SIGNATURE</td> <td><i>Robert L. Price</i></td> </tr> <tr> <td>Robert L. Price</td> <td></td> </tr> <tr> <td>NAME</td> <td></td> </tr> <tr> <td>22,685</td> <td></td> </tr> <tr> <td>REGISTRATION NUMBER</td> <td></td> </tr> <tr> <td>January 18, 2002</td> <td></td> </tr> <tr> <td>DATE</td> <td></td> </tr> </table>			SIGNATURE	<i>Robert L. Price</i>	Robert L. Price		NAME		22,685		REGISTRATION NUMBER		January 18, 2002		DATE	
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DATE																			

Docket No.: 55178-015

PATENT

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Application of :  
William H. HOHENSTEIN, et al. :  
Serial No.: : Group Art Unit:  
Filed: January 18, 2002 : Examiner:  
For: A WATCH WITH ROTATING CONICAL BANDS AND WITH REMOVABLE  
OBJECTS

**PRELIMINARY AMENDMENT**

Commissioner for Patents  
Washington, DC 20231

Sir:

Prior to examination of the above-referenced application, please amend the application as follows:

**IN THE SPECIFICATION:**

Please replace sheets 1-7, as originally filed, with the attached substitute sheets pages 1-6

**IN THE DRAWINGS:**

Please substitute pages 1-6 of the drawings with the attached substitute formal drawings.

REMARKS

The above-referenced application is amended to substitute the specification and drawings. Attached are clean copies of the substitute sheets. Entry of this Preliminary Amendment is respectfully requested.

Respectfully submitted,

MCDERMOTT, WILL & EMERY

  
Robert L. Price  
Registration No. 22,685

600 13<sup>th</sup> Street, N.W.  
Washington, DC 20005-3096  
(202) 756-8000 RLP:kjw  
**Date: January 18, 2002**  
Facsimile: (202) 756-8087

55178-012

A WATCH WITH ROTATING CONICAL BANDS AND  
WITH REMOVABLE OBJECTS

CROSS REFERENCE TO RELATED APPLICATIONS

This application claims priority to U.S. Provisional Application Serial No. 60/144,870 filed July 20, 1999, the contents of which are herein incorporated by reference in their entirety.

BACKGROUND OF THE INVENTION

Field of the Invention

The invention is directed to timepieces, and, more particularly, to timepieces having rotating conical bands which indicate the time and having removable objects, such as a sculpture or other artwork, on the timepiece.

Description of Related Art

Timepieces are well known in the art as are timepieces which can be worn by an individual. Wrist watches, pocket watches, broaches or pendant watches are also known. However, the display of time is typically done using at least hour and minute hands which point, respectively, to the hour of the day and the minute within the hour. Alternatively, digital timepieces are known which display at least hour and minute as numerals, using, for example liquid crystal displays, rather than as pointers to an angular reference to hour and minute.

Existing timepieces have the limitation that they require that the plane of the timepiece face be aligned to be substantially perpendicular with the line of sight of the wearer. In the case of wearable timepieces, this requires that the wearer take some affirmative action to determine the time, such as rotating the wrist so that the orientation of the timepiece face is suitable for reading. This has a disadvantage that a person, with whom one might be meeting, could perceive such an action as impatience or as boredom with the subject of the meeting.

Another problem with the prior art is that the appearance of the watch remains substantially unchanged. This creates some difficulty in fashion coordination, where a user might desire to change the appearance of a timepiece so as to coordinate with a different outfit.

SUMMARY OF THE INVENTION

The problems associated with the prior art are overcome, in accordance with one aspect of the invention, by providing a watch, the time indication of which is represented by rotating bands which can be viewed from both the top and the side to obtain an indication of time.

In accordance with another aspect of the invention, a fixed or rotating platform exists on the top of the timepiece, normally called the bezel, which will support an object, such as any type of sculpture or other aesthetically appealing rendering. Such objects would be removable to permit the sculpture or other rendering to be swapped out with different sculptures or renderings.

The foregoing and other features, aspects and advantages of the present invention will become more apparent from the following detailed description of the present invention when taken in conjunction with the accompanying drawings.

#### BRIEF DESCRIPTION OF THE DRAWINGS

Figure 1 shows a top view of an exemplary timepiece in accordance with the invention.

Figure 2 is a side view of an exemplary timepiece in accordance with the invention.

Figure 3 is a section view of a timepiece along section lines 3--3 of Figure 1.

Figures 4A, 4B and 4C show top, side and bottom views of drive cylinders used in accordance with one aspect of the invention.

Figure 5 is an illustration of a shaft to which the cylinders of Figure 4 might be mounted for operation.

Figure 6 is an exemplary implementation of a wishbone spring, typically secured to an object that is to be mounted to the timepiece.

Figure 7 is a perspective view of an exemplary stud which can be mounted to a timepiece and which mates with the spring of Figure 6 to hold an object in place.

#### DETAILED DESCRIPTION OF THE INVENTION

Figure 1 shows a view of an exemplary timepiece, namely a watch, in accordance with the invention. Watch 100 has a watchband 110 and a fixed time indicator 120. A section 3-3 along the centerline of the watch is shown more in detail in Figure 3. Watch 100 has an object 130 removably attached thereto as described more hereinafter.

Figure 2 is a side view of exemplary watch 100. An object, in this example an ornamental sculpture 130, is removably mounted on the top of the watch. In the illustrated embodiment, the watch has two concentric conical time display bands or rings which rotate about the center of the watch. The bottom one 200, in this example, shows the hour as a location under time indicator 120. The top one 210 shows the minutes. Other bands or rings could be implemented as well. A watch base 230 serves as a mechanical base for the timepiece and permits the connection 240 of a watchband 110.

Figure 3 is a section view of watch 100 along section lines 3-3 in Figure 1. A watch base 230 and platform 320 are mounted together by connection to shaft 220. In this example, the shaft can be

press fit or snap fit into the base and into the platform although other techniques for attachment could be used as well. The platform 320 serves as a mounting base for an object such as an ornament or sculpture. The conical time display band or rings 200 and 210 mount to cylinders 310 and 300 respectively, shown in more detail in Figure 4. One exemplary technique for mounting includes soldering or welding the time display rings to the cylinders. Other techniques may be used as well. Cylinders 300 and 310 are mounted to the shaft 220 concentrically, so as to permit independent rotation, and cylinder 300 fits within cylinder 310. Motor mechanism 330 is coupled to a gear arrangement at the bottom of each cylinder 300 and 310 by one or more gear trains, indicated as dashed lines. A battery 340 may be conveniently mounted to the watch base. The gear train could, of course, be driven by a mechanical drive mechanism of the type used in timepieces for hundreds of years, rather than by an electrical motor.

Figures 4A, 4B and 4C show exemplary cylinders 300 and 310. A gear or gear teeth are mounted to or formed in the bottom of the cylinder. These engage the gear arrangement driven by the motor. In the implementation of cylinder 300, a notch 410 is provided into which a split C ring may be fitted to keep cylinder 310 from sliding down and interfering with the engagement of the cylinder 300 with the gear arrangement of cylinder 300 driven by the motor.

Figure 5 is an illustration of shaft 220. It too has a notch (500) provided into which a split C ring may be fitted to keep cylinder 300 from sliding down and engaging the watch base which might interfere with the rotation of the cylinder.

The preferred technique for mounting an object to platform 320 is shown in Figures 6 and 7. There are two basic parts to this system, a wishbone shaped spring (Figure 6) and a stud (Figure 7). In general the spring is secured to the piece that it is to be attached to the watch and the stud is secured to platform 320, preferably at the top and center of the watch.

The wishbone spring 600 is preferably made of spring steel. In an exemplary embodiment, the dimensions of this spring would be approximately 20 mm long, 5 mm wide, and 0.5 mm thick. There is a drilled hole 610 at one end to facilitate a screw for securing to the object to be removably attached. A drilled hole 620 in the middle of the spring, slightly smaller than the pilot diameter of the stud, 710, facilitates easy attachment of the spring mounted object to the stud.

The stud is preferably made of hardened and polished steel. This piece has three distinct features, namely, the base 720 (preferably about 5 mm in diameter), the square 730, and the pilot diameter (each about 2 mm in diameter). The total height from bottom of base to top of the pilot diameter of this part is about 5 mm. The pilot diameter has a tapered end 740 which tapers down from the diameter of pilot diameter to a minor diameter smaller than the size of hole 620 in the wishbone spring.

In this embodiment, it is important that the diameter of the hole 620, in the center of the wishbone spring, be smaller than the diameter of the pilot diameter of the stud. About 25% smaller

would be preferable. In this embodiment, it is also important that the apex of the square be the same size as the pilot diameter to facilitate easy removal.

For assembly, a object, such as sculpture 130 is attached to the wishbone spring 600, using, for example, a screw that passes through hole 610 in the spring and into the body of the object.

5 The wishbone spring is pressed over the tapered (conical) end of the stud and forced open until it opens enough to pass over the pilot diameter until it snaps into place on the square section of the stud. The square section of the stud allows several important advantages. First, the object can be positioned in any 90 degree increment. Second, the object will be easily removed by a simple turn of 45 degrees and lifting away from the watch.

10 Although the present invention has been described and illustrated in detail, it is clearly understood that the same is by way of illustration and example only and is not to be taken by way of limitation, the spirit and scope of the present invention being limited only by the terms of the appended claims and their equivalents.



## WHAT IS CLAIMED IS:

1. A timepiece having one or more concentric rotating bands indicating time increments.
2. The timepiece of claim 1 in which the one or more rotating bands are viewable from both the side and from the top for determining time.
3. The timepiece of claim 1 in which the rotating bands are conical in shape.
4. The timepiece of claim 1 in which the rotating bands are cylindrical in shape,
5. The timepiece of claim 1 in which the rotating bands rotate about a bezel.
6. The timepiece of claim 5 in which the bezel is fixed and the bezel serves as a mounting platform for an object.
7. The timepiece of claim 5 in which the bezel rotates and the bezel serves as a mounting platform for an object.
8. A timepiece having a visible surface and a mounting mechanism on said surface for removably attaching an object.
9. The timepiece of claim 8 in which said mounting mechanism comprises a stud.
10. The timepiece of claim 8 in which said stud is configured to engage a wishbone shaped spring.
11. The timepiece of claim 8 in which said stud comprises a conical portion, a cylindrical portion and a square portion.
12. For use with an object to be mounted on a timepiece, a spring mechanism attached to said object and configured to removably connect to a mounting mechanism attached to said timepiece.
13. The spring mechanism of claim 12 attached to said object with a screw.

14. The spring mechanism of claim 12 in which the spring mechanism comprises an elongated piece of spring steel having a slot running for a portion of its length, the slot forming substantially parallel legs connected at one end and open at the other end.

15. The spring mechanism of claim 14 in which the slot has a hole at a location along its length.

16. The spring mechanism of claim 15 in which said hole has a diameter smaller than a diameter of a mounting mechanism attached to said timepiece to facilitate easy attachment of the object to said mounting mechanism.

17. An object to be mounted on a timepiece, comprising an attachment mechanism configured to removably connected to a mounting mechanism attached to said timepiece.

18. A method of manufacturing a timepiece, comprising the steps of:

- a. providing a timepiece having a mounting mechanism for a removable object; and
- b. providing at least one object having an attachment mechanism for attaching said object to said timepiece.

19. A method of assembling a timepiece, comprising the steps of:

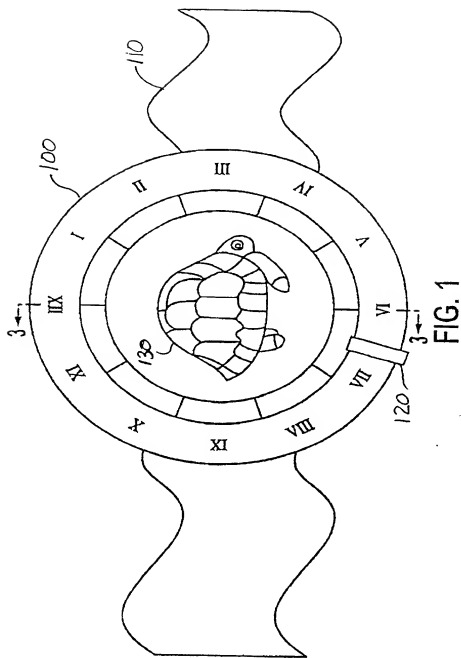
- a. providing a timepiece having a mounting mechanism for a removable object; and
- b. mounting at least one object having an attachment mechanism for attaching said object to said mounting mechanism.

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## ABSTRACT OF THE DISCLOSURE

A timepiece, such as a watch, has a plurality of concentric rotating bands, viewable from both above and from the side so that a viewer may read the time without changing the orientation of the timepiece. The timepiece has an attachment mechanism that permits the removable attachment of objects, such as sculptures or other ornamental pieces to the surface of the timepiece.

2022-05-25 05:21:02



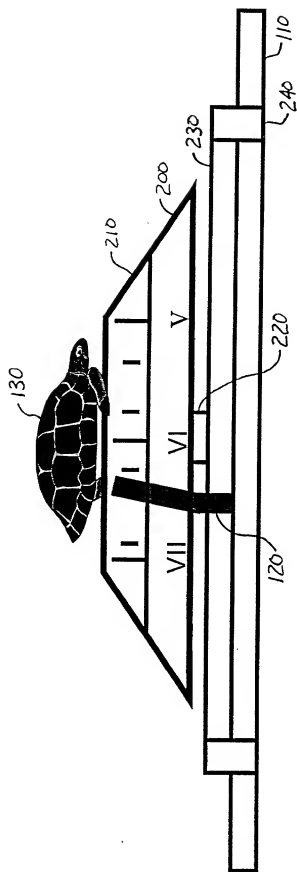


Fig. 2

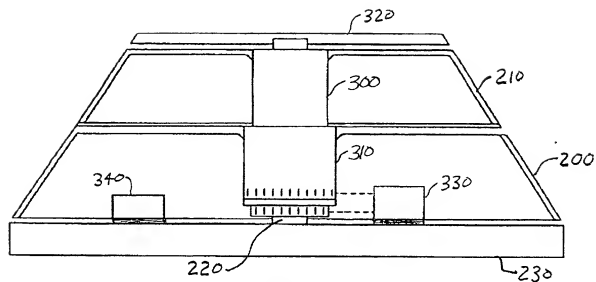


FIG. 3

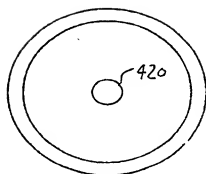


FIG. 4A

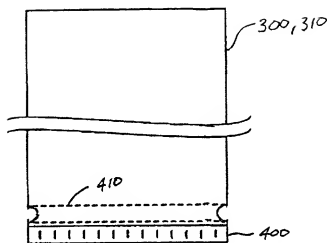


FIG. 4B

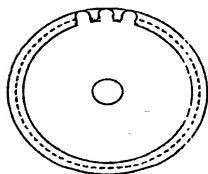


FIG. 4C

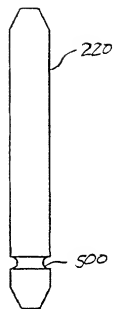


FIG. 5



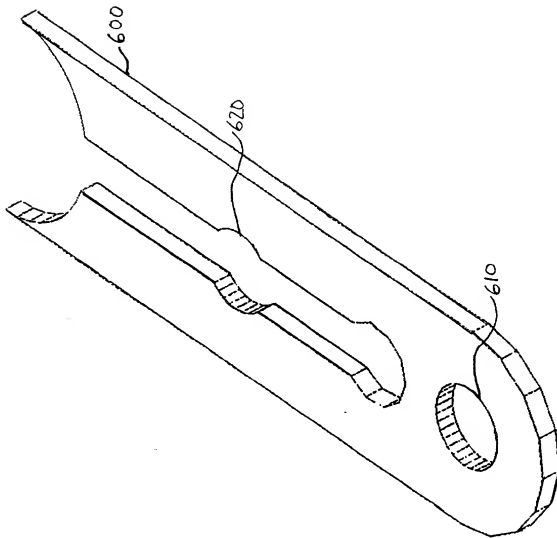


FIGURE 6

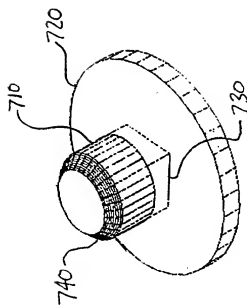


FIGURE 7

**A WATCH WITH ROTATING CONICAL BANDS AND**  
**WITH REMOVABLE OBJECTS**

**CROSS REFERENCE TO RELATED APPLICATIONS**

This application claims priority to U.S. Provisional Application Serial No. 60/144,870 filed July 20, 1999, the contents of which are herein incorporated by reference in their entirety

**BACKGROUND OF THE INVENTION****Field of the Invention**

The invention is directed to timepieces, and, more particularly, to timepieces having rotating conical bands which indicate the time and having removable objects, such as a sculpture or other artwork, on the timepiece.

**Description of Related Art**

Timepieces are well known in the art as are timepieces which can be worn by an individual. Wrist watches, pocket watches, broaches or pendant watches are also known. However, the display of time is typically done using at least hour and minute hands which point, respectively, to the hour of the day and the minute within the hour. Alternatively, digital timepieces are known which display at least hour and minute as numerals, using, for example liquid crystal displays, rather than as pointers to an angular reference to hour and minute.

Existing timepieces have the limitation that they require that the plane of the timepiece face be aligned to be substantially perpendicular with the line of sight of the wearer. In the case of wearable timepieces, this requires that the wearer take some affirmative action to determine the time, such as rotating the wrist so that the orientation of the timepiece face is suitable for reading. This has a disadvantage that a person, with whom one might be meeting, could perceive such an action as impatience or as boredom with the subject of the meeting.

Another problem with the prior art is that the appearance of the watch remains substantially unchanged. This creates some difficulty in fashion coordination, where a user might desire to change the appearance of a timepiece so as to coordinate with a different outfit.

**SUMMARY OF THE INVENTION**

The problems associated with the prior art are overcome, in accordance with one aspect of the invention, by providing a watch, the time indication of which is represented by rotating bands which can be viewed from both the top and the side to obtain an indication of time.

In accordance with another aspect of the invention, a fixed or rotating platform exists on the top of the timepiece, normally called the bezel, which will support an object, such as any type of sculpture or other aesthetically appealing rendering. Such objects would be removable to permit the sculpture or other rendering to be swapped out with different sculptures or renderings.

The foregoing and other features, aspects and advantages of the present invention will become more apparent from the following detailed description of the present invention when taken in conjunction with the accompanying drawings.

#### BRIEF DESCRIPTION OF THE DRAWINGS

Figure 1 shows a top view of an exemplary timepiece in accordance with the invention.

Figure 2 is a side view of an exemplary timepiece in accordance with the invention.

Figure 3 is a section view of a timepiece along section lines 3--3 of Figure 1.

Figures 4A, 4B and 4C show top, side and bottom views of drive cylinders used in accordance with one aspect of the invention.

Figure 5 is an illustration of a shaft to which the cylinders of Figure 4 might be mounted for operation.

Figure 6 is an exemplary implementation of a wishbone spring, typically secured to an object that is to be mounted to the timepiece.

Figure 7 is a perspective view of an exemplary stud which can be mounted to a timepiece and which mates with the spring of Figure 6 to hold an object in place.

#### DETAILED DESCRIPTION OF THE INVENTION

Figure 1 shows a view of an exemplary timepiece, namely a watch, in accordance with the invention. Watch 100 has a watchband 110 and a fixed time indicator 120. A section 3-3 along the centerline of the watch is shown more in detail in Figure 3. Watch 100 has an object 130 removably attached thereto as described more hereinafter.

Figure 2 is a side view of exemplary watch 100. An object, in this example an ornamental sculpture 130, is removably mounted on the top of the watch. In the illustrated embodiment, the watch has two concentric conical time display bands or rings which rotate about the center of the watch. The bottom one 200, in this example, shows the hour as a location under time indicator 120. The top one 210 shows the minutes. Other bands or rings could be implemented as well. A watch base 230 serves as a mechanical base for the timepiece and permits the connection 240 of a watchband 110.

Figure 3 is a section view of watch 100 along section lines 3-3 in Figure 1. A watch base 230 and platform 320 are mounted together by connection to shaft 220. In this example, the shaft can be

press fit or snap fit into the base and into the platform although other techniques for attachment could be used as well. The platform 320 serves as a mounting base for an object such as an ornament or sculpture. The conical time display band or rings 200 and 210 mount to cylinders 310 and 300 respectively, shown in more detail in Figure 4. One exemplary technique for mounting includes soldering or welding the time display rings to the cylinders. Other techniques may be used as well. Cylinders 300 and 310 are mounted to the shaft 220 concentrically, so as to permit independent rotation, and cylinder 300 fits within cylinder 310. Motor mechanism 330 is coupled to a gear arrangement at the bottom of each cylinder 300 and 310 by one or more gear trains, indicated as dashed lines. A battery 340 may be conveniently mounted to the watch base. The gear train could, of course, be driven by a mechanical drive mechanism of the type used in timepieces for hundreds of years, rather than by an electrical motor.

Figures 4A, 4B and 4C show exemplary cylinders 300 and 310. A gear or gear teeth are mounted to or formed in the bottom of the cylinder. These engage the gear arrangement driven by the motor. In the implementation of cylinder 300, a notch 410 is provided into which a split C ring may be fitted to keep cylinder 310 from sliding down and interfering with the engagement of the cylinder 300 with the gear arrangement of cylinder 300 driven by the motor.

Figure 5 is an illustration of shaft 220. It too has a notch (500) provided into which a split C ring may be fitted to keep cylinder 300 from sliding down and engaging the watch base which might interfere with the rotation of the cylinder.

The preferred technique for mounting an object to platform 320 is shown in Figures 6 and 7. There are two basic parts to this system, a wishbone shaped spring (Figure 6) and a stud (Figure 7). In general the spring is secured to the piece that it is to be attached to the watch and the stud is secured to platform 320, preferably at the top and center of the watch.

The wishbone spring 600 is preferably made of spring steel. In an exemplary embodiment, the dimensions of this spring would be approximately 20 mm long, 5 mm wide, and 0.5 mm thick. There is a drilled hole 610 at one end to facilitate a screw for securing to the object to be removably attached. A drilled hole 620 in the middle of the spring, slightly smaller than the pilot diameter of the stud, 710, facilitates easy attachment of the spring mounted object to the stud.

The stud is preferably made of hardened and polished steel. This piece has three distinct features, namely, the base 720 (preferably about 5 mm in diameter), the square 730, and the pilot diameter (each about 2 mm in diameter). The total height from bottom of base to top of the pilot diameter of this part is about 5 mm. The pilot diameter has a tapered end 740 which tapers down from the diameter of pilot diameter to a minor diameter smaller than the size of hole 620 in the wishbone spring.

In this embodiment, it is important that the diameter of the hole 620, in the center of the wishbone spring, be smaller than the diameter of the pilot diameter of the stud. About 25% smaller would be preferable. In this embodiment, it is also important that the apex of the square be the same size as the pilot diameter to facilitate easy removal.

For assembly, a object, such as sculpture 130 is attached to the wishbone spring 600, using, for example, a screw that passes through hole 610 in the spring and into the body of the object.

The wishbone spring is pressed over the tapered (conical) end of the stud and forced open until it opens enough to pass over the pilot diameter until it snaps into place on the square section of the stud. The square section of the stud allows several important advantages. First, the object can be positioned in any 90 degree increment. Second, the object will be easily removed by a simple turn of 45 degrees and lifting away from the watch.

Although the present invention has been described and illustrated in detail, it is clearly understood that the same is by way of illustration and example only and is not to be taken by way of limitation, the spirit and scope of the present invention being limited only by the terms of the appended claims and their equivalents.

WHAT IS CLAIMED IS:

1. A wearable timepiece having one or more concentric rotating bands indicating time increments.
2. The wearable timepiece of claim 1 in which the one or more rotating bands are viewable from both the side and from the top for determining time.
3. The wearable timepiece of claim 1 in which the rotating bands are conical in shape.
4. The wearable timepiece of claim 1 in which the rotating bands are cylindrical in shape,
5. The wearable timepiece of claim 1 in which the rotating bands rotate about a bezel.
6. The wearable timepiece of claim 5 in which the bezel is fixed and the bezel serves as a mounting platform for a decorative object.
7. The wearable timepiece of claim 5 in which the bezel rotates and the bezel serves as a mounting platform for a decorative object.
8. A wearable timepiece having a visible surface and a mounting mechanism on said surface for removably attaching a decorative object.
9. The wearable timepiece of claim 8 in which said mounting mechanism comprises a stud.
10. The wearable timepiece of claim 8 in which said stud is configured to engage a wishbone shaped spring.
11. The wearable timepiece of claim 8 in which said stud comprises a conical portion, a cylindrical portion and a square portion.

12. For use with a decorative object to be mounted on a timepiece, a spring mechanism attached to said decorative object and configured to removably connect to a mounting mechanism attached to said timepiece.

13. The spring mechanism of claim 12 attached to said decorative object with a screw.

14. The spring mechanism of claim 12 in which the spring mechanism comprises an elongated piece of spring steel having a slot running for a portion of it's length, the slot forming substantially parallel legs connected at one end and open at the other end.

15. The spring mechanism of claim 14 in which the slot has a hole at a location along its length.

16. The spring mechanism of claim 15 in which said hole has a diameter smaller than a diameter of a mounting mechanism attached to said timepiece to facilitate easy attachment of the decorative object to said mounting mechanism.

17. An decorative object to be mounted on a wearable timepiece, comprising an attachment mechanism configured to removably connected to a mounting mechanism attached to said wearable timepiece.

18. A method of manufacturing a timepiece, comprising the steps of:

- a. providing a wearable timepiece having a mounting mechanism for a removable decorative object; and
- b. providing at least one decorative object having an attachment mechanism for attaching said decorative object to said timepiece.

19. A method of assembling a timepiece, comprising the steps of:

- a. providing a wearable timepiece having a mounting mechanism for a removable decorative object; and
- b. mounting at least one decorative object having an attachment mechanism for attaching said decorative object to said mounting mechanism.

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(54) Title: A WATCH WITH ROTATING CONICAL BANDS AND WITH REMOVABLE OBJECTS

(57) Abstract: A timepiece, such as a watch, has a plurality of concentric rotating bands, viewable from both above and from the side so that a viewer may read the time without changing the orientation of the timepiece. The timepiece has an attachment mechanism that permits the removable attachment of objects, such as sculptures or other ornamental pieces to the surface of the timepiece.

WO 01/05209 A2



**COMBINED DECLARATION FOR PATENT APPLICATION AND POWER OF ATTORNEY**

(Includes Reference to PCT International Application(s))

Attorney's Docket Number

55178-015

As below named inventor, I hereby declare that

My residence, post office address and citizenship are as stated below next to my name.

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled

**WATCH WITH ROTATING CONICAL BANDS AND WITH REMOVABLE OBJECTS**

the specification of which

☐ is attached hereto☒ was filed as United States application Serial No 10/031,375

on January 18, 2002

and was amended on January 18, 2002 (if applicable)

☒ was filed as PCT international application Number PCT/US00/19728

on July 20, 2000

and was amended under PCT Article 19 on (if applicable).

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose information which is known to me to be material to patentability in accordance with Title 37, Code of Federal Regulations, § 1.56.

I hereby claim foreign priority benefits under Title 35, United States Code, § 119(a)-(d) or Section 365(b) of any foreign and/or international application(s) for patent or inventor's certificate or Section 365(a) of any PCT international application(s) designating at least one country other than the United States of America listed below and have also identified below any foreign application(s) for patent or inventor's certificate or any PCT international application(s) designating at least one country other than the United States of America filed by me on the same subject matter having a filing date before that of the application(s) of which priority is claimed:

**PRIOR FOREIGN/PCT APPLICATION(S) AND ANY PRIORITY CLAIMS UNDER 35 U.S.C. 119:**

COUNTRY (If PCT, indicate "PCT")	APPLICATION NUMBER	DATE OF FILING (day, month, year)	PRIORITY CLAIMED UNDER 35 USC 119
PCT	PCT/US00/19728	July 20, 2000	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

I hereby claim the benefit under 35 USC § 119(e) of any United States provisional application(s) listed below

**PRIOR PROVISIONAL APPLICATION(S):**

Application Number	Filing Date
60/144,870	July 20, 1999

I hereby claim the benefit under Title 35, United States Code, § 120 of any United States application(s), or § 365(c) of any PCT international application(s) designating the United States of America that is/are listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in that/those prior application(s) in the manner provided by the first paragraph of Title 35, United States Code, § 112, I acknowledge the duty to disclose information which is material to patentability as defined in Title 37, Code of Federal Regulations, § 1.56 which occurred between the filing date of the prior application(s) and the national or PCT international filing date of this application.

**PRIOR U.S. APPLICATIONS OR PCT INTERNATIONAL APPLICATIONS DESIGNATING THE U.S. FOR BENEFIT UNDER 35 U.S.C. 120:**

U.S. APPLICATIONS		STATUS (Check One)		
U.S. Application Number	U.S. Filing Date	Patented	Pending	Abandoned

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PGT/US00/19728	July 20, 2000				

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I hereby declare that all statement made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

Signature of Inventor 201:

Signature of Inventor 202:

Signature of Inventor 203:

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*Andrew Von Zadora-Gerlof*

*Ron DeCorte*

Date **3/4/02**

Date **4/9/2002**

Date **04.17.02**

SWORN TO ME THIS 17TH DAY OF APRIL 2002

DID SIGN MR. ANDREW VONZADORA-GERLOF

**ROGER A. MORR**  
NOTARY PUBLIC, STATE OF OHIO  
MY COMMISSION EXPIRES MAY 27, 2002

Sworn to me this 17th day of April 2002,  
by Ron DeCorte, that he did sign the foregoing statement.

**LAWRENCE J. AYOUB**  
Notary Public, State of New York  
No. 24-4810548, Kings County  
Certificate Filed in NY County  
Commission Expires May 31, 2002

Notary Public  
Personally appeared William H. Hohenstein and acknowledged that he signed the foregoing to be his free act and deed  
Subscribed, ss: April 27, 2002  
Commission of Massachusetts